### **TESTIMONY**

## Enhancing Emergency Preparedness in California

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# Statement of Michael A. Wermuth<sup>1</sup> Director, Homeland Security Program The RAND Corporation

### Before the Little Hoover Commission State of California

### January 26, 2006

Mr. Chairman and distinguished Commission Members, thank you for giving me the opportunity to appear before you today, to address the important issue of ways to improve emergency preparedness in the State of California.

My remarks today will be informed in great measure by relevant and comprehensive research and analysis conducted by the RAND Corporation over many years. It includes the major areas of research and analysis to support the deliberations and recommendations of the congressionally mandated Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction (also known as the "Gilmore Commission")<sup>2</sup>, over the course of its five annual reports to the President and the Congress from 1999 to 2004.

My remarks are also based on significant research on related matters for the White House Office of Homeland Security, the U.S. Department of Homeland Security, the U.S. Department of Justice (DOJ) (including the Federal Bureau of Investigation (FBI)), numerous entities within the Department of Defense, various agencies of the Intelligence Community, the U.S. Department of State, the U.S. Department of Health and Human Services (HHS), the U.S. Department of Energy, the U.S. Department of Transportation, and several other federal departments and agencies. It also includes research and analysis for various State and government entities (including the State of California), publicly and privately funded foundations, and other entities of the private sector.

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<sup>&</sup>lt;sup>1</sup> The opinions and conclusions expressed in this testimony are the author's alone and should not be interpreted as representing those of RAND or any of the sponsors of its research. This product is part of the RAND Corporation testimony series. RAND testimonies record testimony presented by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

<sup>&</sup>lt;sup>2</sup> Established by Section 1405 of the National Defense Authorization Act for Fiscal Year 1999, Public Law 105–261

<sup>(</sup>H.R. 3616, 105<sup>th</sup> Congress, 2nd Session) (October 17, 1998), as amended.

### The RAND Homeland Security Program

Research in the Homeland Security Program supports agencies and entities charged with preventing, preparing for, responding to, and recovering from the effects of terrorist activity and other disasters (both natural and manmade) within U.S. borders. Projects in this program include critical infrastructure protection, emergency management, terrorism risk management, border control (particularly ports), first responders and preparedness, domestic threat assessments, domestic intelligence, homeland defense, and manpower and training.

As noted previously, the largest strategic client for this program is the U.S. Department of Homeland Security (DHS), and RAND has conducted or is currently conducting research and analysis for numerous components of DHS, include the Office of the Assistant Secretary for Intelligence and Analysis, the Office of the Assistant Secretary for Infrastructure Protection, the Office of the Under Secretary for Science and Technology, the Office of Private Sector Coordination, the Office of State and Local Government Coordination and Preparedness, the Office for the National Capital Region, the Transportation Security Administration, and the U.S. Coast Guard. Those efforts include foundation research, analysis, and expert advice on the development of the National Response Plan (NRP), the National Incident Management System (NIMS), and the National Infrastructure Protection Plan (NIPP), as well as major efforts on risk modeling, and terrorism motivations, intentions, and capabilities.

RAND is currently conducting significant research and analysis for the FBI and for the National Institute of Justice. In cooperation with the National Memorial Institute for the Prevention of Terrorism in Oklahoma City, RAND maintains the internationally-recognized Worldwide Terrorism Incident Database, which RAND started in 1968. We are also leading a major collaborative project for the Institute for Information Infrastructure Protection at Dartmouth College on the economic implications of cybersecurity.

RAND has conducted and is conducting homeland security, homeland defense, and counterterrorism related research for numerous entities in the Department of Defense, including the office of the Assistant Secretary of Defense for Homeland Defense, the Joint Staff, the Military Departments, the Defense Threat Reduction Agency (DTRA), the Defense Advanced Research Projects Agency, several major U.S. commands, and defense elements of the Intelligence Community. RAND also works directly with major non-defense agencies of the Intelligence Community.

RAND also is in the third phase of security research and analysis for the Amtrak Corporation.

RAND is into the fourth phase of groundbreaking research and analysis on responder safety and protection for the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC), at HHS.

I will not try to catalogue all of the work that RAND has done in California over the years. But just to mention a few recent, major projects directly related to the topics under consideration today:

In 2002, RAND conducted a comprehensive study for the California Office of Emergency Services (OES) on California's vulnerability to terrorism.

Also in 2002, at the request of the Speaker of the California Assembly, RAND compiled a major collection of Issue Papers on *The Implications of the September 11 Terrorist Attacks for California*, which included analyses involving the travel and tourism industry, the airline industry, the availability of terrorism-related insurance, California's preparedness for weapons of mass destruction, and the psychological effects of terrorism.

In 2003, as part of a major study for DTRA, OES hosted a major exercise (here in Sacramento), based on a terrorist attack with "dirty" bombs in the San Francisco Bay area, that involved senior representatives from various State agencies, local government and local response organizations, and federal agencies.

RAND is into the second phase of research and analysis for Los Angeles International Airport under contract with the Los Angeles World Airports authority.

In addition, RAND has conducted numerous workshops, conferences symposia, normally in collaboration with a number of California State and local and U.S. government entities, and California institutes of higher learning, on terrorism, homeland security, and related issues.

As some of you know, RAND also has conducted collaborative research for this Commission. In the late spring of 2004, RAND completed an 18-month study, requested by this Commission and supported with funding from the California Endowment, about how well the California public health system was prepared to protect Californians in the event of a public health emergency in the form of a contagious infectious disease.

### California Emergency Preparedness

As part of its examination of California's emergency preparedness, especially the State's capacity to respond to major catastrophes when local governments are overwhelmed, the Commission has asked that I address the role of the State and how the State should be organized to effectively perform the full range of responses to large scale emergencies – preparedness, response, recovery and prevention. In doing so, you have recommended that I address certain issues and questions in three topic areas: functional integration, chain of command, and management strategies.

Let me start by expressing an opinion—but one that is based on significant research over several years—that, overall, California already has one of the best systems for emergency response of any State in the Union. That research includes RAND analytic support to the Gilmore Commission, related studies for the Defense Threat Reduction Agency, and the studies previously mentioned for various California entities. That conclusion is also understandable from a number of different viewpoints. By any economic measure, California would be—if it were an independent nation—at least the fifth largest in the world. As a result, this State and its political subdivisions have been able to devote significant resources over many years to preparedness and response capabilities. Moreover, California has been compelled to organize and enable response capacity because of a long history of natural disasters—earthquakes, flash floods and mudslides, wildland fires.

Does that mean that California's systems, programs, and plans for emergency preparedness are perfect? No; nor, I suggest, will they ever be. Even for natural disasters, where there has been a wealth of historical experience and where lessons learned have helped to improve preparedness capacity, the is frequently the unexpected aspect of an event that stresses or may even overwhelm one element of a response. In the more ambiguous area of terrorism, that dynamic is likely to be magnified several fold.

I am, by no means, an expert on California's current statutory and regulatory authority in this area. However, it is apparent that the Governor has plenty of authority to implement extraordinary measures when a disaster occurs (including authority under the California Constitution as well as specified authority under Title 2, Chapter 7 of the California Government Code, and elsewhere). A key question that the Commission will, I am certain, want to address: are the statutory and regulatory authorities, the policies and programs, the systems and plans in

place *prior* to a disaster, as robust and as effective as they can be, given the recognition that resources will always be finite?

Jerry Bremer, a member of the Gilmore Commission from its inception until the day he was appointed by the President to head our efforts in Iraq, has always been fond of saying: "We Americans have always been great at *responding* to disasters and other emergencies. What we don't do well is to *prepare* for disasters."

To a certain extent, that stems from what we are as a nation. We are a Union of 50 sovereign States. In the context of prevention, preparedness, response and recovery for disasters, that structure makes certain aspects of those activities very problematic. Unlike countries with unitary governments—the United Kingdom and Israel being good examples—and centralized control of most important aspects of disaster response, the U.S. structure frequently presents barriers to the most effective systems and processes.

And when it comes to the effective and efficient allocation of resources, especially those from the federal government, politics often plays a major role. In recent months, Congress has failed to agree on a new allocation formula for federal preparedness assistance, with the potential share of Members home state or districts driving the process. Just a few days ago, there were howls of protest when the Secretary of Homeland Security implemented new guidelines making future allocation based in large part on a comparison of risks among jurisdictions seeking assistance.

With that as background and context, now I will turn to the specific issues and questions raised by the Commission in its invitation to me.

### **FUNCTIONAL INTEGRATION**

Public sector preparedness requires the integration and coordination of responsibilities across many state agencies and among state, federal and local partners. Please describe the authorities and responsibilities that must be integrated into a coherent emergency preparedness strategy for California.

As noted, there are existing emergency authorities that come into play when an event occurs. Pre-event, authorities are often less clear. Nevertheless, clear direction and leadership from the Governor may well be sufficient to establish the authority and responsibility, for one or more State agencies, to produce effective emergency preparedness.

### **First Principles**

Emergency preparedness:

- Should be based on an all-hazards approach that fully integrates all responder
  disciplines: law enforcement, fire services, emergency medical services, public health,
  medical care (public and private), emergency management, and applicable elements of
  the private sector, especially designated critical infrastructures.
- Must be evaluated through clear, comprehensive, and specific measures of performance and effectiveness and follow through with tests and audits of those measures.

Whether for natural disasters, accidents, or intentionally perpetrated events—terrorism and other violent criminal activities—most response measures and, therefore, most preparedness activities will have similar foundations. It is, of course, the scope of such activities for truly catastrophic events that will drive the systems at the State level. California has some excellent models for prevention and preparedness activities at the "regional" level in the State—the Los Angeles Operational Area Terrorism Early Warning Group being an excellent example of a multi-jurisdictional, multi-functional organization. Any structures at the State level must be able to "plug in" to such structures at the state's regional and local levels. The State should encourage and enable the establishment of standard structures of these types on a statewide basis.

This is probably a good point to suggest that California should press the federal government to establish DHS regional offices. As I have testified previously before the Congress,<sup>3</sup> regional structures provide an opportunity for more day-to-day contact among preparedness and response officials, accommodate the differences in preparedness and response activities based on U.S. geographic and demographic diversity, and allow federal regional officials to develop a better understanding of the specific needs and capabilities of the states and localities in a particular region. Recent events have clearly shown that closer planning and coordination in the preparedness phase between the federal government and its state and local partners could help to avoid serious missteps in the execution of response plans. That cannot, in my view, all be accomplished from Washington. Look at any map you choose—geography, demography, locations of previous disasters and emergencies—and California will logically have one of the regional offices somewhere in the state.

What organizational models should the State consider to bring together decision-making authority for emergency preparedness?

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<sup>&</sup>lt;sup>3</sup> See, e.g., testimony presented to the U.S. Senate Committee on Homeland Security and Governmental Affairs, January 26, 2005.

There is likely no single, existing organizational model that will be readily adaptable for coordination and integration of responsibilities and authorities at the State level, but structures, authorities and responsibility must reflect the priorities established by legislative and executive direction.

### **First Principles**

• Establish a tiered, hierarchical structure for preparedness planning and coordination that fully integrates all State organizations and appropriate private sector entities.

The top of that structure should involve the principals of the State agencies, one or more senior representatives of the Governor's office, and perhaps senior representatives from the State Assembly. The next tier could be organized to focus on specific preparedness functions—e.g., public health and medical care, law enforcement, private sector collaboration—and headed by the appropriate State agency, but those functional tiers should all have coordinating and reporting lines back to the top of the structure.

To be more explicit, the "principals committee" should have as its membership each state cabinet secretary and the head of each independent state agency that has preparedness responsibilities. It could be headed by the Governor, the Lieutenant Governor, or a senior representative of the Governor (e.g., the Director of the Office of Emergency Services (OES) or the Governor's Homeland Security Advisor). If not the Governor, the person who chairs this effort should be empowered to speak and act on behalf of the Governor. As a further example, a public heath preparedness "subcommittee" might logically be led by the California Health and Human Services Agency (CHHSA), and chaired by a senior, sub-cabinet level official, whose members are from agencies with a role to play in public health preparedness.

## How might the organizational challenges of preparation and response efforts differ from those for prevention and recovery?

Although organizational challenges for prevention, preparedness, response, and recovery activities may vary over time, they are interrelated and often interdependent. For example, for a biological incident—naturally occurring or manmade, response activities may already be underway before the source or cause of the incident is discovered, which may drive further preventive efforts. Lessons learned from response and recovery activities for actual incidents will inform future preparedness activities. Certainly, effective preparedness plans and programs, structures, systems and process must, therefore, address prevention on the one hand, and response and recovery on the other.

### **First Principles**

 Preparedness organizational structures should mirror, to the greatest extent possible, response structures.

If there is a structure formed to advise the Governor on his or her decisions in time of crisis, preparedness structures should be aligned in similar fashion. If the emergency response structure is fundamentally a cabinet (or sub-cabinet) level body, then the preparedness structure should be based on that response structure. It is clear that the Director of OES has significant responsibilities at the state level for managing responses to emergencies. It would therefore be reasonable to base preparedness programs around OES. If the Governor chooses to have another person direct preparedness activities (e.g., the adviser for homeland security), the lines of authority and the boundaries of the activity and jurisdiction to support each function must be very clear.

### **CHAIN OF COMMAND**

A robust emergency preparedness strategy must be integrated into the day-to-day functioning of dozens of state agencies, many of which do not have emergency preparedness as their core responsibility. How should California organize its chain of command to provide sufficient authority to support emergency preparedness while recognizing competing needs for authority?

It is clear to me that there is only one person in charge—in "command"—at the State level and that is the State's Chief Executive, the Governor. How the Governor exercises that command authority for different types of incidents may not be as clear.

### **First Principles**

 Establish unambiguous authority to direct preparedness activities within the required functional areas.

If the Governor chooses to exercise the control of preparedness activities for different functions through different entities—a "lead agency" structure, e.g., public health preparedness through the Secretary of California CHHSA—that authority and its boundaries should be clear. Agencies that should logically cooperate in the activities should be explicitly directed to cooperate and to establish specified plans or programs, within certain deadlines, as part of their lead agency role to support an overall effort. Cohesion—unity of effort—is important in this area. Someone must

have the authority to determine if all agencies are supporting common goals and not establishing plans and programs on their own, without coordination. As noted earlier, that authority to direct preparations should logically follow the command lines intended to be used for an actual response, absent compelling reasons to the contrary.

California can take significant credit for informing effective incident command structures and processes nationwide. The California Standardized Emergency Management System (SEMS), which grew from Northridge and the California experience with numerous wildland fires, was the principal model used by DHS for creating the incident command (IC) structure of the National Incident Management System (NIMS). For those Unified Command structures above IC, preparedness activities should be closely tied to, if not coincidental with, those response structures.

It was heartening to see the Governor's Executive Order (S-2-05) directing the full integration of NIMS into the state emergency management system.

#### MANAGEMENT STRATEGIES

In addition to organizational strategies, what management strategies must be part of the State's emergency preparedness effort – for example, long-range strategic planning, ongoing threat assessment, and continuous performance measurement? What models might the State look to for managerial excellence in emergency preparedness?

There are numerous management strategies that have application for preparedness activities. Some have likely been implemented in California. All should be considered and those that have been implemented should be periodically reviewed.

### **First Principles**

Establish a common lexicon.

Definitions and terminology are important. Efforts should be undertaken to ensure that all California entities use the same terms to define various functions. For example, "surveillance" when used alone means very different things to law enforcement and public health officials. If any important term is ambiguous and subject to misinterpretation, it should be clarified as part of preparedness activities. It is not necessarily intuitive to everyone what the terms that we are using here today actually mean: prevention, preparedness, response, recovery, homeland security, terrorism, and disasters—the list goes on. Defining and bounding the limits of those

activities is an important starting point. As good as California is in all the areas, I can imagine that everyone who needs to understand those terms likely does not. For example, is emergency preparedness in California for all-hazards? I imagine that it is. Is "homeland security" in California for all-hazards? I don't know but it should be clear to everyone if it is or is not—i.e., that it only pertains to terrorism, if that is the case.

### Manage to risk.

I start from a logical assumption that there is no such thing as perfect prevention or protection. We are vulnerable in an infinite number of ways. In the case of terrorism, our adversaries are flexible, adaptive, and frequently not subject to easy identification. Terrorist incidents are not really susceptible to prediction, in the same way that some natural disasters may be. An effective preparedness for and response to terrorism depends heavily on valid intelligence about our adversaries—and that will also never be perfect. Risk management in the terrorism context must be a considered analysis of threat, vulnerabilities, and consequences. Any preparedness program that manages primarily to vulnerabilities or consequences is a sure-fire way to allocate resources ineffectively. Threat assessments are critical—what are the enemy's motivations, specific intentions, and known capabilities to carry out attacks? Vulnerability assessments are important as they may also coincide with potential threats; but the vulnerability of a potential target does not, in itself, justify significant protective measures if there is no known threat to exploit that vulnerability. Managing to fear is not an effective approach to countering terrorism. We fear, for example, that terrorists may seek to use a nuclear device to attack the United States; but at present, there is no credible information that any terrorist organization possesses that capability. The risk, therefore, is relatively low compared to others.

Develop robust preparedness directives, policy, and plans.

As noted previously, preparedness responsibilities and authorities must be clear. Although Washington does not always provide them, there is a good model in this area at the federal level. Homeland Security Presidential Directive-8 (HSPD-8), "National Preparedness," set the appropriate policy stage for preparedness at the national level. Among other things, HSPD 8:

- Directs that preparedness activities reflect an all-hazards approach
- Defines preparedness (and distinguishes it from prevention)
- Directs the Secretary of Homeland Security to establish a National Preparedness Goal
- Directs the establishment of readiness standards and metrics

<sup>&</sup>lt;sup>4</sup> December 17, 2003, available at http://www.whitehouse.gov/news/releases/2003/12/20031217-6.html.

- Establishes a mechanism for research and development requirements, including those from states and localities
- Directs the establishment of comprehensive training and exercise programs to support the preparedness goal
- Encourages citizen participation in preparedness
- o Directs the establishment of a comprehensive preparedness information plan
- Directs assessment and evaluation plans to determine the adequacy of support for the preparedness goal

Actions directed under HSPD-8 have produced a number of worthwhile plans and programs. One of the first was the development of the National Planning Scenarios, a comprehensive description of 15 different potential incidents, including natural disasters, terrorist attacks, and other emergencies. Those scenarios, although not perfect in every detail and not all-inclusive, provide a useful framework for developing preparedness and response plans, and conducting training and exercises.

Still under development but well along in that process is a Universal Task List (UTL)—a comprehensive listing of those tasks that would have to be performed in each of the 15 planning scenarios. Following that process has been the development—borrowing from the Department of Defense capabilities-based planning methodology—of a Target Capabilities List, which is an attempt to identify those capabilities necessary to accomplish the tasks in the UTL. I know that California has been asked to participate in the development of the national-level plans and programs.

To the extent that California does not have a similar, comprehensive preparedness policy directive, it should.

Exercise, exercise, exercise.

Nothing, in my view, helps to identify issues and develop solutions to conflicts and other gaps within and among those entities responsible for preparedness and response than well-planned and well-executed exercises. There are a couple of points to stress in this area. Whether within a single discipline or jurisdiction or through multi-disciplinary or multi-jurisdictional exercises, senior officials must be involved at some, preferably the final, stage of any exercise. Those who must make decisions in a crisis should see the potential effects of those decisions in exercises that stress that decisionmaking aspect. Exercises should be designed and conducted against rigid standards. Not every organization can do that.

Establish a formal lessons learned process.

The U.S. military community has learned after much experience that it can be painful, even fatal, to "re-learn" lessons learned. California unfortunately has experienced a number of disasters and other significant emergencies. Lessons from those experiences can help to guide future preparedness plans and programs. That information can help to inform activities at a number of levels in government, in the private sector, and for the citizenry. That information should be collected and made available, with appropriate access protections, to those entities that can benefit from it. The federal government has undertaken such a program at the national level.<sup>5</sup>

Develop standards and metrics.

At several points in this testimony, I have noted the value of standards—for training, for exercises, for equipment, for communications, for organizational structures. California has the opportunity to be (already is to some extent) a national leader in this arena. Standards must be clear, concise, comprehensive, and reasonably attainable; and the application of standards should be accompanied by comprehensive means of evaluating how well standards are being applied, through a detailed system of metrics to assess effectiveness and performance.

• Establish a comprehensive public information system.

Conventional wisdom has been that governments cannot be open with citizens about the threats they face, because such activities may create heightened fear. Practical experience has taught that the more informed citizens are prior to a disaster, the less likely they are to panic and the closer they will listen to and trust government pronouncements about actions to be taken. This is especially true in the event of a biological incident—natural or intentionally perpetrated. Programs should be expanded to include more comprehensive public information and education before, during and after an incident, and should be exercised for refinement.

• Include outside people and organizations.

I have frequently said in presentations in a variety of forums that all knowledge and wisdom does not reside in Washington, D.C. I suppose some in this room might apply that same epithet to Sacramento. Seriously, there are great advantages to be gained through advisory boards and

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<sup>&</sup>lt;sup>5</sup> See <u>www.llis.gov</u>.

commissions, comprised of nongovernmental people, and the use of independent studies an analysis. California uses external advisory groups in some areas with great effect.

And if you assume that I am suggesting using the RAND Corporation, or some similar entity or capability, you have assumed correctly. Through decades of providing policy research and analysis to numerous clients at all levels of government, we can demonstrate that independent, objective analysis has great value. Often, internal government analyses and recommendations—however well-intentioned and thoroughly compiled—may for whatever reason be suspect or subject to being discredited.

### Review existing authorities.

If it has not done so recently, California should undertake a comprehensive review and develop a catalogue of those authorities for emergency preparedness and response. That review should include an assessment of how those authorities conflict with or complement those at the federal level. An anecdote may be in order here. In the year 2000, at a major conference held in Los Angeles, which RAND cosponsored with several government agencies and institutions of higher learning in California, I gave a presentation on a number of federal emergency authorities that might be executed in the event of a catastrophic attack by terrorists. One such authority was the federal power to implement a quarantine in the event of a biological attack. During the conference break following my remarks, I was directly and vehemently challenged by a senior official in California state government who claimed that there was no federal quarantine authority—that was exclusively a purview of the states. I was surprised that this particular official did not know about the federal statutes<sup>6</sup> on that point and had to produce a copy of it to convince that official.

### CONCLUSION

Given all of the foregoing, I readily acknowledge that describing things that should be done is a lot easier than doing many of them. Efforts in this area are and will continue to be hard work. It will often be expensive. It can be frustrating as well, especially when things do not work as planned. Nevertheless, it is important work and our citizens, who in the main do not expect perfection, do expect governments at all levels to undertake reasonable measures given available resources to promote public safety.

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<sup>&</sup>lt;sup>6</sup> Principally 42 U.S. Code, Section 264.